Are clinical guidelines a useful tool for insulin adjustment?

Katrina Woolley

ARTICLE POINTS

1 There is little written information available to assist DSNs in the practice of insulin adjustment in the home.

2 DSNs from across the country were asked about their framework of practice for insulin adjustment.

3 Contrasting views about the value of guidelines have been documented.

4 DSNs varied in their use of guidelines, and their views on whether they strengthened practice, enhanced autonomy or restricted practice.

5 DSNs generally tend not to discuss the instigation of insulin adjustment beforehand with GPs or consultants.

KEY WORDS

- **DSNs**
- **Insulin adjustment**
- **Framework for practice**
- **Guidelines**

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Introduction

The clinical role of the community diabetes specialist nurse (DSN) involves the practice of insulin adjustment in the home. A study was conducted to examine the framework of this practice, with particular emphasis on guidelines. DSNs across both primary and secondary care were asked to describe their practice and their views on guidelines. Secure practice, professional accountability, and ultimately the safeguarding of the patient and DSN are paramount. This article describes how guidelines assist DSNs in meeting these requirements.

Diabetes specialist nurses (DSNs) who are new to the post will find little written information to assist them in the practice of insulin adjustment in the home. Although this is only a small part of the DSN's role, it is one that has implications for the safety of both patients and nurses. It encroaches on the role of the physician and involves skill and expertise, but is surrounded by ambiguity and lacks a formal structure. The practice of insulin adjustment in the home has evolved with the development of the specialist role, the intent being to aid and strengthen this aspect of care for the benefit of patients.

The NHS and Community Care Act 1990 has resulted in a purchaser/provider culture and, more recently, the White Paper *The New NHS: Modern, Dependable* (Secretary of State for Health, 1997) has led to the need for more definitive practice. Increasing emphasis is being placed on patient choice and primary-oriented care, which may be further affected by changes in the indemnity status of trusts.

Professional accountability

In 1994, the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (UKCC) endorsed the role of clinical nurse specialist practitioner through publication of the *Post-Registration, Education and Practice* Report (PREP). This report abandoned the concept of an extended role, but emphasised professional accountability.

The UKCC document The *Scope of Professional Practice* (1992a) sets out 'principles' for the registered nurse to follow, the onus being on the nurse to maintain professional accountability. Naish (1995) explains that a nurse may perform any task provided that it is in the patient's best interest *and* this expansion of the role has been agreed with the employer.

In its document *Standards for the Administration of Medicines,* the UKCC (1992b) recommends that, before administering medicines on her own authority, the nurse should ensure that a local protocol has been agreed between the medical practitioner, nurse and pharmacist.

The Medicinal Products: Prescription by Nurses Act 1992 allows community nurses to prescribe from the *Nurse Prescribers' Formulary*. However, as this does not include insulin, it does not provide legal cover for the community DSN in the practice of insulin adjustment (Cradock, 1997). The RCN Diabetes Nursing Forum (1991) supports insulin adjustment by the DSN, stating that it is a relevant aspect of her role and recommending that it may be performed following discussion with the diabetologist and appropriate documentation.

There appears to be ambiguity over an agreed theoretical framework for the DSN, possibly to include pharmacology, before performing this task (Felton, 1997). Cradock (1997) described how the practice of insulin adjustment evolved with the specialist role, and claimed that to take

this aspect of practice away is to take away the role.

Concepts of guidelines/protocols

Clearly, there is a need for a framework for insulin adjustment that is flexible, supportive and improves the quality of patient care. Of equal importance, however, is clarification of practice, maintenance of professional accountability and ultimately the safety of both the patient and the DSN.

Many healthcare professionals feel that guidelines are restrictive or inappropriate to practice, and may increase the risk of litigation. There has been much debate as to the difference between protocols and guidelines. All feel that they should be research based, and that where this is not possible they should be developed by experts from a mutual decision about best practice.

Hale (1995) describes a clinical guideline as an inflexible approach to a particular event, e.g. a cardiac arrest. Eddy (1990) reports that guidelines are followed in most circumstances, but with some flexibility. Irvine and Donaldson (1993) proposed an alternative of mandatory, near mandatory and optimal directives.

Duff et al (1995) believe that guidelines and protocols differ in the amount of definitive information contained in each and their scope of use: clinical guidelines are broad statements of good practice, used nationally or regionally, and protocols are the local adaptation of these.

Duff et al describe the impetus for the development of guidelines as twofold:

- The need for a management tool to enable comparison of the cost of care with the available resources
- The need for a definition of quality of care to promote the delivery of comparable care nationally.

Eddy (1990) recognises that the lack of time to investigate changes in practice, critically evaluate and adjust care accordingly is a major problem. The RCN (1995) promotes guidelines as a useful tool for reducing inequality of care, emphasising that guidelines which have been properly validated nationally can be adjusted to meet local needs.

Given the many different interpretations of guidelines, it is not surprising that practitioners who are managing care may become confused. It is therefore important to have a common and clear language for all professionals to use.

The legal aspect of the use of written protocols is an important consideration. Moniz (1992), in an American context, discusses cases where the use of protocols has led to malpractice suits against the practitioner. The introduction in the UK of *The Patient's Charter* (Department of Health, 1991), which defines the level of care that individuals have a right to expect from the provider, may lead to such an occurrence.

Martin (1997) suggests that modern 'business practice' leads individuals to expect an efficient, competent service. Where this does not occur, there is increased demand to investigate the treatment provided and debate around what guidelines have been followed. This may result in a reluctance to develop guidelines, the reasoning being that, if they are produced and not followed to the letter, the practitioner may be accused of professional negligence.

Moniz (1992) argues that guidelines are not necessarily the best way forward, and recommends clinical research to examine the outcomes in primary care settings rather than defined rules for each clinical event.

The above examples demonstrate contrasting interpretations of guidelines as a safe pathway for practice.

Aim of the study

A study was therefore undertaken to establish the views of DSNs as to whether the development of guidelines would strengthen their practice, enhance autonomy, or be restrictive to practice.

Methodology

Two methods were used. The first was a postal questionnaire to DSNs primarily based in the community. The addresses of diabetes bases were obtained from the 1996 BDA Directory of DSNs and trust/health centres. A total of 98 questionnaires were sent out. A teabag was enclosed with the questionnaire to suggest that respondents had a tea break while completing the form.

PAGE POINTS

1 Many feel that guidelines are restrictive, inappropriate to practice, and may increase the risk of litigation.

2 Clinical guidelines have been described as broad statements of good practice, and protocols as local adaptations of these.

3 The RCN promotes guidelines as a useful tool for reducing inequality of care.

4 There may be a reluctance to develop guidelines, because of the threat of professional negligence if they are produced but not followed.

PAGE POINTS

1 One third of DSNs used guidelines as a practice framework and one third used custom and practice.

2 The remainder used either job role or a combination of frameworks.

3 Many guidelines were developed by the diabetologist, with or without consultation with the DSN.

Questions sought information on:

- Employer
- Base
- Where insulin adjustment was performed
- Education
- Framework of role and responsibilities
- Methods of referral
- Liaison between healthcare team members
- Guidelines.

Specific views on guidelines were requested regarding:

- Strengthening practice
- Enhancing autonomy
- Restricting practice.

Respondents were asked to indicate their views on a scale of 1 to 7 (where 1 = disagree and 7 = agree).

The second method used to obtain information was a qualitative, semi-structured telephone interview. A small number of the original respondents were contacted. The interview reflected the earlier questionnaire, but explored the practice and organisation of the respondents in greater depth. The telephone interview again requested opinions on whether guidelines strengthened practice, enhanced autonomy or restricted practice. The reasons why these views were held were examined further.

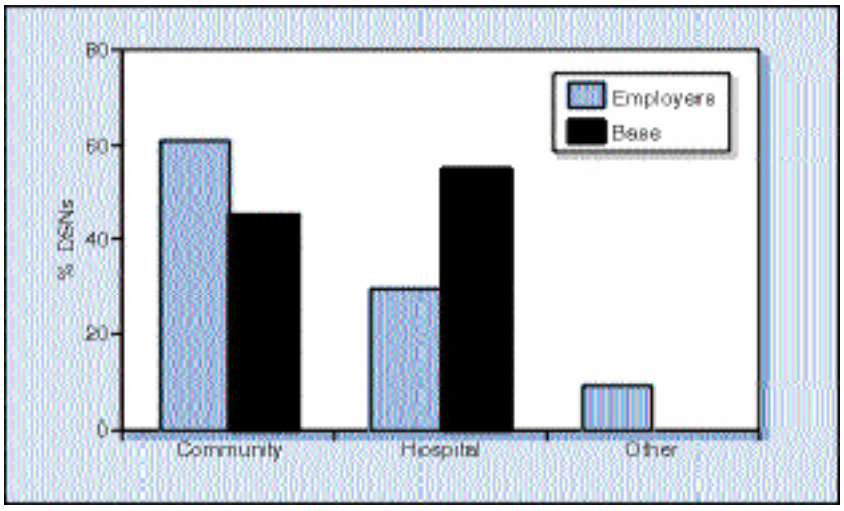

Figure 1. Comparison of the employers and bases of the DSNs in the study.

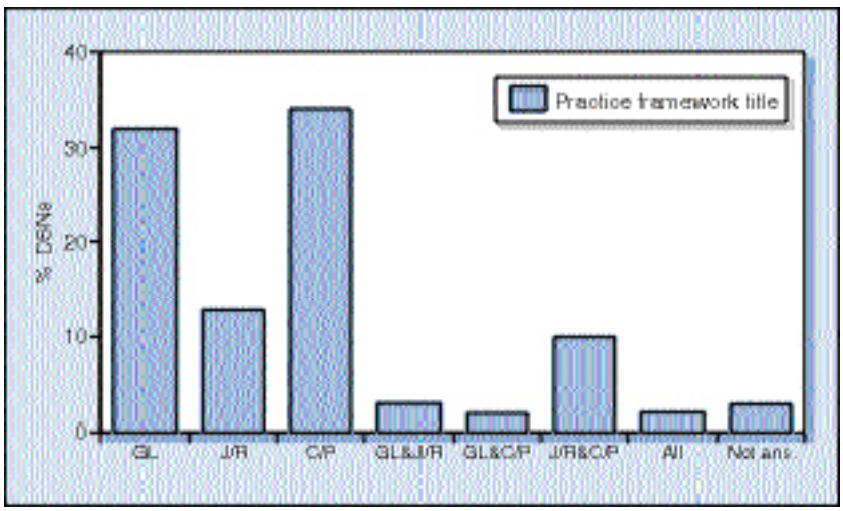

Figure 2. The different practice framework titles used by the DSNs in the study.

Results and discussion

Sixty-four completed questionnaires were returned, giving a 66% response rate. Sixty-one per cent of the respondents were employed in a community trust, although only 45% were based in the community (*Figure 1*). This prevented analysis of a totally community-oriented sample, as had initially been intended.

Of the 64 respondents, 88% carry out home visits, yet 94% adjust insulin in the home setting. Also, 87% adjust insulin in the clinic setting. Therefore 13% of community DSNs adjust insulin in the clinic.

These variations may be due to insulin adjustments being made from centres via the telephone and more effective use of time at the clinics for all DSNs. It may be that the patient is allowed to choose the setting that is most appropriate for him/her. However, the results do show that the role and organisation of the DSN with regard to insulin adjustment are not clear-cut in either primary or secondary care.

Practice framework titles used by the DSN

Postal questionnaire results revealed that 32% of respondents used guidelines, 34% used custom and practice, and 13% used job role. The remainder used a mixture of the three (*Figure 2*).

The use of custom and practice suggested evolvement of the role, which is allowed by the UKCC (1992a) provided that individual professional accountability is maintained. Evidence-based practice is important, but so too is ensuring that outdated practices are not followed. Frequent comments were made about concern when new in post and expectations being high from the outset.

Some argued that guidelines will only inform others of their practice. However,

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this is a valuable opportunity to promote the role, and one that should not be missed.

Many guidelines were developed by the diabetologist, with or without consultation with the DSN. These ranged from satisfactory to vague or incomplete, leaving the DSN to practise under her own autonomy.

The job role consisted of minimal written support, e.g. one sentence in the contract. There was no evidence of a clear, written framework to follow.

Strengthening practice

Advantages of the use of clinical guidelines were felt to be: clarification of the role; provision of a standard and yardstick against which to measure one's own practice; meeting legal requirements; and a positive demonstration of the role of the DSN to others.

The disadvantage was a reduction in the flexibility of practice, which was detrimental to patient care.

Enhancing autonomy

Advantages were again clarification of the role, and a yardstick against which to measure one's own practice.

Disadvantages focused on a fear of rigidity. Some felt that guidelines would neither enhance nor detract from their role.

Restricting practice

Advantages were felt to be an improved standard for all to attain, since there appears to be so much variation in practice, and the flexibility to improve care.

Disadvantages were that, in order to cover the variation in practice, guidelines may be so broad as to be ineffective (*Figure 3*).

Liaison with others members of the healthcare team

Respondents were asked whether, when performing a patient assessment that consequently required insulin adjustment, they discussed the case with the patient's GP or consultant before instigating adjustment. The result was a resounding 'no' by 82%; 9% stated yes and 9% sometimes (*Figure 4*).

Further discussion in the telephone interviews revealed that DSNs felt they were more knowledgeable, and had more expertise, than GPs in this area. They were

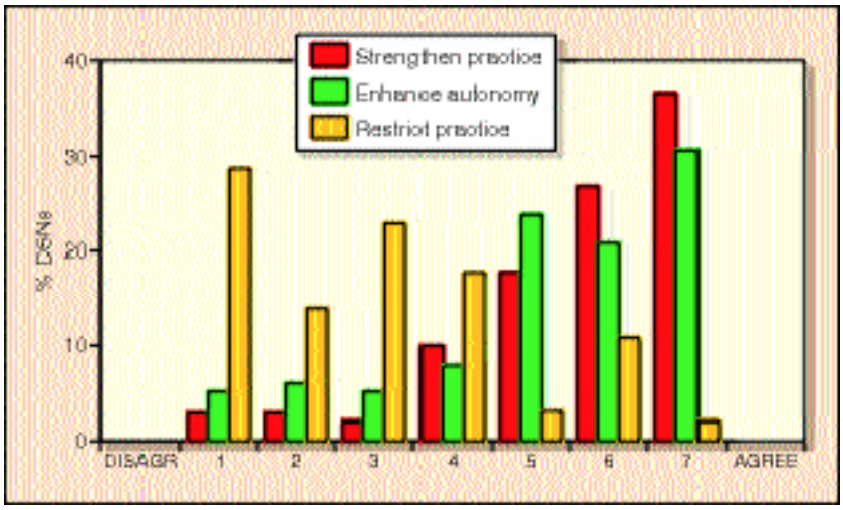

Figure 3. Views of the DSNs on whether guidelines will strengthen practice, enhance autonomy and restrict practice. Postal questionnaire results; views were indicated on a scale of 1 to 7 (1= disagree; 7 = agree).

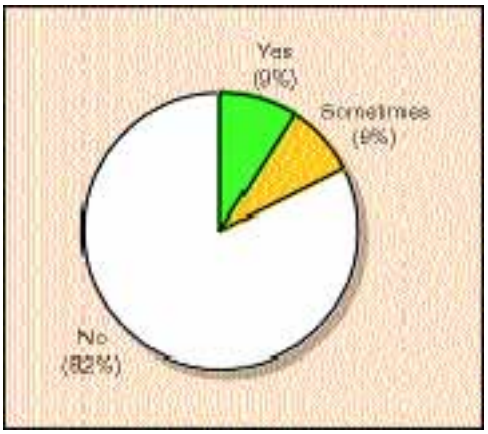

Figure 4. Frequency with which DSNs discuss changes with the diabetologist or GP before insulin adjustment.

confident in their competence to carry out insulin adjustment. The general exceptions were when a change of insulin type needed to be prescribed or the physician had stated that this aspect of practice from the DSN is not required for his patients.

Comments from respondents revealed huge variations in this area of practice, depending on the GP and the consultant concerned:

'The GP would be puzzled if I asked for his agreement for an adjustment.'

'I cannot adjust insulin for patients under one consultant. For the other consultant, he is confident of my care.'

Practical issues of time limitations were raised. It was felt that to inform and

PAGE POINTS

1 Four-fifths of DSNs did not discuss the instigation of insulin adjustment with GPs or consultants beforehand.

2 DSNs felt they were more knowledgeable, and had more expertise, than GPs in this area.

3 Time limitations made it impractical to discuss every case of insulin adjustment with the GP or consultant.

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PAGE POINTS

1 Many DSNs feel that as they are practising within the UKCC *Scope of Professional Practice*, there is no urgency to develop guidelines.

2 Guidelines are an important educational resource and a means of improving the safety of both professionals and patients.

3 Guidelines will help to raise and maintain standards of patient care and professional practice.

4 The use of guidelines should promote the development of more equitable services.

5 Guidelines need continual updating to ensure that they reflect current evidence-based research.

discuss each individual with the GP and/or consultant would be too restrictive in an already demanding field.

Local organisation of insulin adjustment is so variable that what occurs in one area may be totally different from what happens in another. Many recognise that guidelines for insulin adjustment have the potential to endorse their professional knowledge and accountability. However, there does not appear to be any urgency to develop guidelines, as many consider they are already practising within the UKCC *Scope of Professional Practice* (UKCC, 1992a).

DSNs seem to feel that it is the consultant who leads the way and decides how much authority they should have. In addition, it was felt that for a DSN to initiate the guidelines themselves, it would be a time-consuming activity involving collaboration with the main parties in primary and secondary care.

Conclusion

This study has focused on the views of DSNs practising primarily in the community, although the results show a cross-analysis between primary and secondary care. With increasing demand for services, guidelines are being recognised as an important educational resource and a means of improving the safety of professionals and patients. The UKCC (1992b), in its document *Standards for the Administration of Medicines,* advocates the development of locally agreed guidelines.

Increasing demands and expectations of the role of the DSN have led to a desire to raise and maintain standards of patient care and professional practice. Guidelines may assist in this aspect also.

Teamwork is essential. The DSN should be at the forefront in developing her/his own guidelines through collaboration and partnership with the diabetes team and primary and secondary care. DSNs should not allow themselves to be dictated to and, as professionals in their own right, should promote all aspects of the role.

Guidelines will aid audit by enabling a more measured response to government issues, facilitating comparison of outcomes of care to meet government aims, as set out in *The New NHS: Modern, Dependable* (Secretary of State for Health, 1997). They may be a useful tool in helping DSNs to achieve this aim and develop more equitable services.

It is important that guidelines are seen as a live document which may be used in conjunction with ongoing education, meetings and peer/team support, and reflects current evidence-based research.

This study has allowed discussion with many DSNs across the country, and has described how each practises and interacts with the diabetes team, highlighting their enthusiasm for providing diabetes care.

The advantages and disadvantages of a variety of frameworks for practice have been discussed. The findings suggest that, while guidelines may not solve all the problems associated with the practice of insulin adjustment, on balance and in the absence of an acceptable alternative, the benefits outweigh the disadvantages. ■

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